

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1.-2. (Cancelled)

3. (Currently Amended) An apparatus ~~according to claim 1,~~ for audio coding,
comprising:

a high-frequency audio coder which encodes high-frequency components of a digital audio signal;

a downsampling unit which lowers a sampling frequency of the same digital audio signal as the high-frequency audio coder processes;

a first noise suppressor which suppresses noise components contained in the signal from the downsampling unit;

a low-frequency audio coder which encodes the signal processed by the first noise suppressor, and

a second noise suppressor which suppresses high-frequency noise components of the digital audio signal before the digital audio signal is processed by the high-frequency audio coder and the downsampling unit, wherein

when the high-frequency audio coder is disabled, the second noise suppressor skips suppression of the high-frequency noise components and allows the digital audio signal to pass through it the second noise suppressor.

4. (Currently Amended) An apparatus ~~according to claim 1,~~ for audio coding,
comprising:
a high-frequency audio coder which encodes high-frequency components of a
digital audio signal;
a downsampling unit which lowers a sampling frequency of the same digital
audio signal as the high-frequency audio coder processes;
a noise suppressor which suppresses noise components contained in the signal
from the downsampling unit; and
a low-frequency audio coder which encodes the signal processed by the noise
suppressor, wherein when the high-frequency audio coder is enabled, the noise
suppressor skips suppression of the low-frequency noise components, and inputs the
digital audio signal to the low-frequency audio ~~decoder~~ coder.

5.-8. (Cancelled)

9. (Currently Amended) An apparatus ~~according to claim 8,~~ for audio coding,
comprising:
a first echo suppressor which suppresses high-frequency echo components of a
digital audio signal;
a high-frequency audio coder which encodes the signal processed by the first
echo suppressor;
a downsampling unit which lowers a sampling frequency of the same digital
audio signal as the first echo suppressor processes;

a second echo suppressor which suppresses echo components contained in the signal processed by the downsampling unit; and

a low-frequency audio coder which encodes the signal processed by the second echo suppressor, wherein

when the high-frequency audio coder is disabled, the first echo suppressor skips suppression of the echo components and allows the digital audio signal to pass through ~~it~~ the first echo suppressor.

10. (Currently Amended) An apparatus ~~according to claim 8,~~ for audio coding, comprising:

a first echo suppressor which suppresses high-frequency echo components of a digital audio signal;

a high-frequency audio coder which encodes the signal processed by the first echo suppressor;

a downsampling unit which lowers a sampling frequency of the same digital audio signal as the first echo suppressor processes;

a second echo suppressor which suppresses echo components contained in the signal processed by the downsampling unit; and

a low-frequency audio coder which encodes the signal processed by the second echo suppressor, wherein

when the high-frequency audio coder is enabled, the second echo suppressor skips suppression of the echo components, and inputs the digital audio signal to the low-frequency audio ~~decoder~~ coder.

11.-14. (Cancelled)

15. (New) An apparatus for coding a digital audio signal, comprising:

a band division unit which divides the digital audio signal into high-frequency components and low-frequency components;

a first audio coder which encodes the high-frequency components of the digital audio signal in accordance with a mode signal which instructs encoding the high-frequency components of the digital audio signal;

a second audio coder which encodes the low-frequency components of the digital audio signal;

a first suppressor which suppresses noise components contained in the digital audio signal before encoding operation of the first and second audio coders;

a second suppressor which suppresses noise components contained in the low-frequency components of the digital audio signal before encoding operation of the second audio coder; and

a controller which causes the second audio coder to encode the low-frequency components of the digital audio signal and disables the first suppressor, when the mode signal is disabled.

16. (New) A method of coding a digital audio signal, comprising:

dividing the digital audio signal into high-frequency components and low-frequency components;

encoding the high-frequency components of the digital audio signal in accordance with a mode signal which instructs encoding the high-frequency components of the digital audio signal;

encoding the low-frequency components of the digital audio signal;

first suppressing noise components contained in the digital audio signal before the high-frequency components and the low-frequency components of the digital audio signal are encoded;

second suppressing noise components contained in the low-frequency components of the digital audio signal before the low-frequency components of the digital audio signal are encoded; and

when the mode signal is disabled, encoding the low-frequency components of the digital audio signal and disabling the first suppressing noise components contained in the digital audio signal.

17. (New) An apparatus for coding a digital audio signal, comprising:

a suppressor which suppresses noise components of high-frequency components and low-frequency components contained in the digital audio signal in case that a mode signal instructs encoding both of the high-frequency components and the low-frequency components, and suppresses noise components of low-frequency components contained in the digital audio signal in case that the mode signal instructs encoding the low-frequency components; and

a coder which encodes both of the high-frequency components and the low-frequency components contained in the digital audio signal after the noise components are suppressed by the suppressor in case that the mode signal instructs

encoding both of the high-frequency components and the low-frequency components, and encodes the low-frequency components contained in the digital audio signal after the noise components are suppressed by the suppressor in case that the mode signal instructs encoding the low-frequency components.

18. (New) A method of coding a digital audio signal, comprising:

suppressing noise components of high-frequency components and low-frequency components contained in the digital audio signal when the high-frequency components and the low-frequency components are encoded in accordance with a mode signal which instructs encoding both of the high-frequency components and the low-frequency components or encoding only the low-frequency components;

suppressing noise components contained only in the low-frequency components of the digital audio signal, when the mode signal instructs encoding only the low-frequency components in accordance with the mode signal;

encoding both of the high-frequency components and the low-frequency components whose noise components are suppressed when the mode signal instructs encoding both of the high-frequency components and the low-frequency components; and

encoding only the low-frequency components whose noise components are suppressed when the mode signal instructs encoding only the low-frequency components.